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## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2006-23645; Directorate Identifier 2006-CE-04-AD; Amendment 39-14687; AD 2006-15-07]**

**RIN 2120-AA64**

#### **Airworthiness Directives; Mitsubishi Heavy Industries, Ltd. MU-2B Series Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), Department of Transportation (DOT).

**ACTION:** Final rule.

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**SUMMARY:** We are adopting a new airworthiness directive (AD) for certain Mitsubishi Heavy Industries, Ltd. (MHI) MU-2B series airplanes. This AD requires you to incorporate text from the service information into the Limitations Section of the FAA-approved Airplane Flight Manual (AFM). This AD results from a recent safety evaluation that used a data-driven approach to analyze the design, operation, and maintenance of the MU-2B series airplanes in order to determine their safety and define what steps, if any, are necessary for their safe operation. Part of that evaluation was the identification of unsafe conditions that exist or could develop on the affected type design airplanes. Field reports indicate an unsafe condition of improper rigging and/or adjustment of the propeller feathering linkage. Service centers found the unsafe condition during inspections. We are issuing this AD to detect and correct improper rigging of the propeller feathering linkage. The above issue, if uncorrected, could result in degraded performance and poor handling qualities with consequent loss of control of the airplane.

**DATES:** This AD becomes effective on August 24, 2006.

**ADDRESSES:** For service information related to this AD, contact Mitsubishi Heavy Industries America, Inc., 4951 Airport Parkway, Suite 800, Addison, Texas 75001; telephone: (972) 934-5480; facsimile: (972) 934-5488.

To view the AD docket, go to the Docket Management Facility, U.S. Department of Transportation, 400 Seventh Street, SW., Nassif Building, Room PL-401, Washington, DC 20590-001 or on the Internet at <http://dms.dot.gov>. The docket number is FAA-2006-23645; Directorate Identifier 2006-CE-04-AD.

**FOR FURTHER INFORMATION CONTACT:** Rao Edupuganti, Aerospace Engineer, ASW-150, Fort Worth Aircraft Certification Office, 2601 Meacham Blvd., Fort Worth, Texas 76193; telephone: (817) 222-5284; facsimile: (817) 222-5960.

## **SUPPLEMENTARY INFORMATION:**

### **Discussion**

On March 16, 2006, we issued a proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an AD that would apply to certain MHI MU-2B series airplanes. This proposal was published in the Federal Register as a notice of proposed rulemaking (NPRM) on March 22, 2006 (71 FR 14425). The NPRM proposed to require you to incorporate text from the service information into the Limitations Section of the FAA-approved AFM.

### **Comments**

We provided the public the opportunity to participate in developing this AD. The following presents the comment received on the proposal and FAA's response to that comment:

#### **Comment Issue: Issuance of an AD Requiring a Procedure That Has Been in the AFM for Almost 10 Years**

Ralph Sorrells, Mitsubishi Heavy Industries America (MHIA), Inc. contends that while MHIA does not object to the issuance of an AD to ensure that the feathering valve linkage inspection revision is included in the AFMs, MHIA does not understand why this condition would now merit an AD requiring the MU-2B operators to follow a procedure that has been in their AFMs for almost 10 years. This condition has not been the subject of a service difficulty report.

Field reports have indicated that some MU-2B aircraft being inspected by service centers require re-rigging and/or adjustment of the propeller feathering linkage. Typically, misadjustment of the feathering linkage could result in the inability of the linkage to pull the feather valve to function as designed. The inability to feather the propeller could result in asymmetric drag and control difficulties that are outside the operational envelope of the aircraft.

For type certificate data sheet (TCDS) A2PC, Service Bulletin No. 229, dated February 20, 1996, was issued by MHI, Ltd. and mandated by issuance of the Japan Civil Aviation Bureau (JCAB) AD No. TCD 4379-96, dated February 20, 1996, to ensure the continued airworthiness of the airplanes in Japan.

For TCDS A10SW, Service Bulletin No. 090/76-003, dated January 22, 1997, was issued by MHI, Ltd. and the compliance was mandatory. At that time, issuance of an AD by FAA was not warranted, based on the information and lack of risk assessment tools.

Recent accidents and the service history of the MU-2B series airplanes prompted FAA to conduct an MU-2B Safety Evaluation. Part of that evaluation was the identification of unsafe conditions that exist or could develop on the affected type design airplanes. Part of this evaluation was evaluating the JCAB ADs for which there were no FAA ADs. In conducting this evaluation, the team employed new analysis tools that provided a much more detailed root cause analysis of the MU-2B problems than was previously possible. The results of this evaluation warranted the issuance of this AD.

### **Conclusion**

We have carefully reviewed the available data and determined that air safety and the public interest require adopting the AD as proposed except for minor editorial corrections. We have determined that these minor corrections:

Are consistent with the intent that was proposed in the NPRM for correcting the unsafe condition; and

Do not add any additional burden upon the public than was already proposed in the NPRM.

The Agency is committed to updating the aviation community of expected costs associated with the MU-2B series airplane safety evaluation conducted in 2005. As a result of that commitment, the accumulating expected costs of all ADs related to the MU-2B series airplane safety evaluation may be found in the Final Report section at the following Web site:  
[http://www.faa.gov/aircraft/air\\_cert/design\\_approvals/small\\_airplanes/cos/mu2\\_foia\\_reading\\_library/](http://www.faa.gov/aircraft/air_cert/design_approvals/small_airplanes/cos/mu2_foia_reading_library/).

## Costs of Compliance

We estimate that this AD affects 397 airplanes in the U.S. registry.  
 We estimate the following costs to do the AFM insertion:

<b>Labor cost</b>	<b>Parts cost</b>	<b>Total cost per airplane</b>	<b>Total cost on U.S. operators</b>
1 work-hour $\times$ \$80 = \$80	Not applicable	\$80	\$31,760

## Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, Section 106 describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701, "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this AD.

## Regulatory Findings

We have determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

1. Is not a "significant regulatory action" under Executive Order 12866;
2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and
3. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a summary of the costs to comply with this AD (and other information as included in the Regulatory Evaluation) and placed it in the AD Docket. You may get a copy of this summary by sending a request to us at the address listed under ADDRESSES. Include "Docket No. FAA-2006-23645; Directorate Identifier 2006-CE-04-AD" in your request.

## List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

## **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

### **PART 39—AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

**Authority:** 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. FAA amends § 39.13 by adding the following new AD:

# AIRWORTHINESS DIRECTIVE

[www.faa.gov/aircraft/safety/alerts/](http://www.faa.gov/aircraft/safety/alerts/)  
[www.gpoaccess.gov/fr/advanced.html](http://www.gpoaccess.gov/fr/advanced.html)

U.S. Department  
of Transportation  
**Federal Aviation  
Administration**



**2006-15-07 Mitsubishi Heavy Industries, LTD.:** Amendment 39-14687; Docket No. FAA-2006-23645; Directorate Identifier 2006-CE-04-AD.

## Effective Date

- (a) This AD becomes effective on August 24, 2006.

## Affected ADs

- (b) None.

## Applicability

- (c) This AD affects the following airplane models and serial numbers that are certificated in any category:

Type certificate	Models	Serial Nos.
(1) A2PC	MU-2B, MU-2B-10, MU-2B-15, MU-2B-20, MU-2B-25, and MU-2B-26.	008 through 312, 314 through 320, and 322 through 347.
(2) A2PC	MU-2B-30, MU-2B-35, and MU-2B-36	501 through 651, 653 through 660, and 662 through 696.
(3) A10SW	MU-2B-25, MU-2B-26, MU-2B-26A, and MU-2B-40	313SA, 321SA, and 348SA through 459SA.
(4) A10SW	MU-2B-35, MU-2B-36, MU-2B-36A, and MU-2B-60	652SA, 661SA, and 697SA through 1569SA.

## Unsafe Condition

- (d) This AD results from a recent safety evaluation that used a data-driven approach to analyze the design, operation, and maintenance of the MU-2B series airplanes in order to determine their safety and define what steps, if any, are necessary for their safe operation. Part of that evaluation was the identification of unsafe conditions that exist or could develop on the affected type design airplanes. The actions specified in this AD are intended to detect and correct improper rigging of the propeller feathering linkage. The above issue if uncorrected could result in degraded performance and poor handling qualities with consequent loss of control of the airplane.

## Compliance

- (e) To address this problem, you must do the following:

<b>Actions</b>	<b>Compliance</b>	<b>Procedures</b>
<p>Incorporate the following information into the Limitations Section of the FAA-approved Airplane Flight Manual (AFM):</p> <p>(1) For airplanes listed in Type Certificate No. A2PC insert pages 3 and 4 from Mitsubishi Heavy Industries, Ltd. (MHI) MU-2 Service Bulletin No. 229, dated February 20, 1996.</p> <p>(2) For airplanes listed in Type Certificate No. A10SW insert page 3 of 3 from MHI MU-2 Service Bulletin No. 090/76-003, dated January 22, 1997.</p> <p>(3) For all of the above airplanes the logbook entry required after each pilot check on page 3 of MHI MU-2 Service Bulletin No. 090/76-003, dated January 22, 1997, and page 4 of MHI MU-2 Service Bulletin No. 229, dated February 20, 1996, is not required.</p>	<p>Within 100 hours time-in-service after August 24, 2006 (the effective date of this AD).</p>	<p>The owner/operator holding at least a private pilot certificate as authorized by section 43.7 of the Federal Aviation Regulations (14 CFR 43.7) may insert the information into the AFM as specified in paragraph (e) of this AD. Make an entry into the aircraft records showing compliance with this portion of the AD in accordance with section 43.9 of the Federal Aviation Regulations (14 CFR 43.9).</p>

**Note:** The language in the service information states the procedure is an "inspection," but the procedure is a "pilot check."

#### **Alternative Methods of Compliance (AMOCs)**

(f) The Manager, Fort Worth Aircraft Certification Office (ACO), FAA, ATTN: Rao Edupuganti, Aerospace Engineer, ASW-150, Fort Worth ACO, 2601 Meacham Blvd., Fort Worth, Texas 76193; telephone: (817) 222-5284; facsimile: (817) 222-5960, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19.

#### **Related Information**

(g) Japan Civil Aviation Bureau Airworthiness Directive No. TCD 4379-96, dated February 20, 1996, addresses the subject of this AD.

(h) For service information related to this AD, contact Mitsubishi Heavy Industries America, Inc., 4951 Airport Parkway, Suite 800, Addison, Texas 75001; telephone: (972) 934-5480; facsimile: (972) 934-5488. To view the AD docket, go to the Docket Management Facility; U.S. Department of Transportation, 400 Seventh Street, SW., Nassif Building, Room PL-401, Washington, DC 20590-001 or on the Internet at <http://dms.dot.gov>. The docket number is FAA-2006-23645; Directorate Identifier 2006-CE-04-AD.

Issued in Kansas City, Missouri, on July 11, 2006.  
Steven W. Thompson,  
Acting Manager, Small Airplane Directorate, Aircraft Certification Service.  
[FR Doc. E6-11419 Filed 7-19-06; 8:45 am]